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ABSTRACT

A series of six studies of the reading ability of Japanese high school and college students investigated the ability of students to process various literary forms and the types of questions students have difficulty with at different levels of reading proficiency. Over 25,000 students completed various versions of an English reading comprehension examination. Findings of the various studies suggest that: (1) students do not have enough experience dealing with a variety of literary forms; (2) it is better, particularly at the beginning, to teach students using short passages; (3) students at different levels of proficiency need different types of questions; (4) it is important to work on increasing students' reading speed; (5) tests should combine difficult and easy passages; (6) it is important to teach students how to guess the meanings of unknown words from context; and (7) various types of questions have different effects. (Two forms of the English Reading Comprehension Examination are attached.) (RS)

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ED 381 766

Japanese College Students' English Reading Ability

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Abstract

English is a subject that is emphasized in Japanese education, and English reading is the most emphasized skill. Still, it is not clear how well Japanese read English and what type of problems they have. In this paper, I have summarized six studies of the reading ability of Japanese students. In these studies I have looked at the ability of Japanese students to read various literary forms and the problems that Japanese readers have with each one of them. I have also looked at the types of questions students have difficulty with at different levels of reading proficiency. Based on the results of these studies, I have drawn conclusions about the problems Japanese students have reading English and made recommendations for the teaching of reading to Japanese students.

Introduction

English has been emphasized in colleges in Japan, and of the four skills, reading has been the major skill taught in college English courses. Thus, there are many college English reading textbooks. English reading textbooks should be chosen on the basis of the purpose of the class, interests of the students, and students' English proficiency levels. However, the goals of college English courses are usually not specified, and many teachers are not sure what linguistic content should be taught. It is also not clear that how well college students can actually read English. The College Reading Materials Research Project[1], partially funded by Japan Association of Language Teachers (JALT) research grants in 1980 and 1981, was formed to try to find out how well college students can read English and what their problems are in reading English in order to develop suitable reading materials for college students.

In this paper, I am going to summarize the results of five studies[2] related to this project on the English reading comprehension and reading speed of Japanese college students. These were extensive studies which involved a total of over 2500 students. I will report on these studies and discuss the implications of their results.

The First Study

Development of the Tests

In order to investigate college students' English reading proficiency, two parallel tests were developed by the College Reading Materials Research Project. They were called JALT English Reading Test: Form A and C. Each form had five sections: a dialogue, directions, a newspaper article, an essay, and a poem. There were

five or ten multiple choice or short answer questions in each section and each section was worth twenty points, that is, 100 points in total. Each section had 200-500 words including questions. Form C had more words and more complicated passages, and it was more difficult. Vocabulary used in the test was limited to vocabulary that students should have learned or vocabulary that can be understood from the context.

Procedures

These tests were given to more than five hundred college students in four colleges and more than one hundred high school students at one high school. Form A was given in April, 1980, and Form C, in September, 1980. Ten minutes were allowed in each section for Form A, and fifteen minutes for Form C. The test makers made model answers, and each teacher graded his/her students.

Results

The mean score on Form A by college students was 68.6 and Form C was 59.2, a difference of 9.4 points. The mean score for high school students was 62.1 on Form A and 54.4 on Form C, a difference of about eight and about 5 points lower than the scores of the college students. The curve is almost the same. Since most students finished all questions in each section, the time allocated for each section was sufficient.

In Form A, the highest average on the individual sections was for the directions, with more than 90% correct, followed by the dialogue, essay, newspaper, and poem, which was less than 40%. In Form C, the mean score on the essay was the highest, followed closely by the newspaper article, then the poem, directions and the dialogue. High school students' scores were about one point lower, except on the

essay, which were four points lower on Form A.

The time required depended on not only the number of words in that section, but the number of questions and their difficulties. The poem was shortest and had only five questions, and students finished it most quickly. They read an essay faster than a dialogue, a newspaper article, and directions. English majors read faster than other students.

Revised Tests

General results. In order to do better analyses, we revised Forms A and C slightly to make Forms E and F, switching the poems in between Form A and Form C and making small changes in the reading passages and questions. This time, eleven classes at three colleges and three classes at one high school took Forms E and F in April 1981 and before or after summer vacation in 1981 and Form E only before or after winter vacation. We analyzed the results only for students who took both tests, and eliminated some unreliable results, for a total of 126 high school students and 465 college students.

The mean score for college students was 57.78 on Form E and 51.73 on Form F. The mean score for high school students was 55.63 on Form E and 37.22 on Form F. All fourteen classes earned higher scores on Form E than Form F. Among the college classes, mean scores varied a great deal. The highest class mean on Form E, for example, was 74.96 and the lowest was 37.12. The correlation between those tests is .69, and between the directions, .41, the dialogues, .43, essays, .26, newspapers, .16, and poems, .33. Essays have the highest scores, and poems have the second lowest scores in both tests. Dialogues and newspapers have different difficulty levels. Correlations between the total scores and those on the individual sections ranged from .60 to .74.

The correlations between the test scores and total time spent for the tests are -.51 for Form E and -.44 for Form F. For the individual sections, correlations ranged from -.23 to -.49.

Scores of upper and lower groups. We chose 72 students who scored 66 or above in Form E and 60 or above in Form F (upper group) and 72 students who scored 52 or below in Form E and 44 or below in Form F (lower group) in order to clarify the students' problems.

The lower group's total score was 43% of the upper group on Form E and 44% on Form F. For the upper group, the score on the essay was highest. In Form E, the order from essay is directions, dialogue, newspaper, and poem. In Form F, the order of the directions and dialogue was reversed, as was the newspaper and poem. The lower group's order on Form E is newspaper, poem, essay, directions and dialogue and in Form F, essay, dialogue, directions, newspaper, and poem. The upper group was similar with the group as a whole, but the lower group was very different. The lower group obtained 67% of the upper group on the newspaper article in Form E and 57% on the essay, 54% on the newspaper article, and 50% on the poem on Form F. The lower group scored less than 50% of the upper group on all other sections.

Times of upper and lower groups. In all sections of two tests, the upper group spent less time than the lower group. The upper group spent 72-93% of the maximum time allowed, and the lower group, 87-99%. The correlation between the total time and total score was -.46 for the upper group on Form E and -.35 on Form F for the upper group. For the lower group, the correlations were -.28 and -.14 respectively.

The mean score on Form E when it was administered in April 1981 was 61.71 and at the time of winter vacation was 75.89, an increase of 23%. The mean length of time spent on the first test was 35 minutes 29 seconds, and the second test, 29 minutes 48 seconds, so that the

time on the second test was 84% of the time on the first test. The correlations of the scores are .50 and the time, .67.

Changes in the upper and lower groups. The scores of the upper 30% of the students (54 students) and the lower 30% (54 students) were analyzed. The upper group increased 6%, and the lower group increased 52%. The time of the upper group decreased to 76% of the allotted time, and the lower group to 89%. The reading speed of the upper group improved more than that of the lower group.

Evaluation of the Results

Form E & Form E. The two tests were parallel, and F is more difficult than E. The reading ability of college students varies a great deal according to colleges, years, and majors. Freshman linguistics and law majors obtained higher scores in Form E than English major freshmen, but that was reversed in Form F. This means that the English majors increased their reading ability in the first semester.

The results of the second year testing indicated that the students understood essays best and poems least and that college students did much better than high school students on essays. The students read essays fastest and directions and newspaper articles most slowly. Students with lower scores guessed at answers a great deal.

There was a high correlation between reading ability and reading speed. There was a higher correlation between reading ability and reading speed among students with higher scores than among students with lower scores.

The scores for the second administration of Form E were 23% higher than those for first administration of Form E. Students' reading comprehension improved on dialogues and directions and reading

speed for dialogues and poems. Students with higher scores improved their reading speed much more than students with lower scores, while students with lower scores improved their scores more.

Through the various tests administered over a period of two years, the following conclusions can be drawn:

1. College students can read essays faster than any of the other types of passages studied. They have the most difficulty with poems and dialogues.
2. Students who score higher can read faster.
3. Through one year of training, students improved their reading comprehension and particularly their reading speed. Students with higher scores improved their reading speed greatly.

The Second Study

In this study, we looked at what types of errors students make, and the tendencies and frequency of those errors. Specifically, we analyzed the errors of top and bottom students on Forms E & F and compared them. We also compared the errors on Form E the first and second times that the students took it, and we looked to see if there were any changes in the types of errors students made.

Procedures

First, we classified the 70 questions on Forms E & F into five categories: direct, indirect, interpretation, reference, and vocabulary. Answers to questions in the direct category came directly or almost directly from the passage. Questions in the indirect category required students to draw inferences from key words in the passage. Questions in the interpretation category required students to either put two or more pieces of information together and draw an

inference or to draw an inference from the context. Vocabulary questions asked about the meanings of words. Reference questions asked what pronouns or certain other words referred to. Since there were few questions, we combined the interpretation and reference categories.

Results

In the analysis, we determined the expected ratio of errors for the bottom students for each question, based on the top students' ratio of errors and the average difference in errors between the top and bottom students. Judging from such an expected error ratio, the direct category has easier questions than any other. The interpretation and reference categories have more difficult questions than the indirect or direct categories, and the indirect category has more difficult questions than the direct category.

In the direct category, the easiest questions were the ones to which students could find exact answers in the passage, and the more difficult ones required a small amount of rewording. Similarly, in the indirect category, the difficult questions were the ones that were worded differently from the passage, or in the case of multiple choice questions, have a correct answer that is worded differently from the passage. The easier ones have phrases or numbers from the passage. In the interpretation and reference category, answers to difficult questions do not come from one place but from a whole paragraph or the entire passage, so students had to understand not just individual parts but how they fit together.

Evaluation of the Results

According to our evaluation, direct questions are useful to check students' problems and what students have not understood, but they are

not difficult enough to evaluate the top students accurately. Indirect questions are useful for achievement tests, because there is almost the same difference between top and bottom students on each question. Interpretation questions are useful for checking overall reading proficiency of the middle and top students, but they are too difficult for the bottom students.

Bottom students made a wider range of errors on multiple choice questions than top students did. There was a tendency for students to avoid difficult choices. There were fewer kinds of errors on short answer questions from top students than from bottom students. The first time students were tested, the high number of questions with no response accounted for almost half of the difference between the two groups of students in any category of questions.

As for the change of errors over one year, the number of errors of the bottom students decreased greatly, mainly due to a decrease in the number of questions with no answers. Errors on direct questions decreased most, particularly questions whose answers could be copied directly from the passage. Questions in all categories had similar errors the second time.

From the previous analysis, the following conclusions can be drawn:

1. It is necessary to grasp the main ideas of the passages and read at a certain reading speed. Using various literary forms, we have to teach reading for main ideas and reading at a certain speed.
2. When we evaluate students' reading proficiency, we have to use different categories of questions to evaluate different skills.
3. There is a possibility that we can judge students' reading proficiency from their errors or the number of questions they have no response for.

The Third Study

Revision of the Tests

We revised Form E to make Form G and Form F to Form H by changing the questions into multiple choice questions with four alternatives. We decreased the number of questions for the poem from ten on Form F to five on Form H. The number of words on the two revised forms were increased due to the use of multiple-choice questions, from 1,256 to 1,557 in Form G and 2,008 to 2,185 in Form H. (See Form G and Form H in the Appendix.)

Procedures

We administered Form G in April 1983 (G1) and in January 1984 (G2) and Form H in July 1983 (H) to 3 classes of junior English majors at University A and 1 class of freshman economics majors and 1 class of students of mixed majors and levels at University B. We taught these classes with texts using various literary forms, and we tried to increase students' reading speed. We avoided the translation method. We analyzed the results of 199 students who took all three tests.

Overall Results

The correlation between the two tests was .59, and the tests were parallel. The correlations between the sections and the total were all greater than .50, and each individual section indicated a similar reading ability with the total. There was a problem with one question in the poem (V) on Form E, we eliminated it and assigned 5 points for each of the four remaining questions for the analyses.

We computed the mean scores of Form G and H, time spent, correlations between the total scores and scores of sections and between the upper and lower groups, and the increase for a year.

Form H was more difficult than Form G. The correlation between two tests was .59, and between the score and the time for G1 is -.45, H is -.37, and G2 is -.38. The average scores of essays and dialogues were the highest in both tests, and those of poems and newspapers were the lowest. The students read the dialogue and directions fastest in G and the essay and dialogue fastest in H. They read poems and newspaper articles most slowly in both tests. The correlations between the essays are highest (higher than .60) and those between the score and time are highest in dialogues (higher than -.40).

Results of the Upper and Lower Groups

Scores. The average scores of the lower group were 59% of the upper group, and the lower group spent 120% of the time of the latter group. Those two groups have large difference in reading ability. The upper group earned their best scores on essays and dialogues, and the lower group earned their best scores in dialogues and newspapers. There was an especially large difference in the essays. Both groups read the directions and dialogue fastest and the poem most slowly on Form G, and the upper group read the essay and dialogue fastest and the lower group, the essay and newspaper article on Form H. Both groups read the poem slowly on Form H.

The correlations between the total scores and essays were high in both tests and groups. The upper group's correlations between poems and the total scores are high. This means that they really need to understand the contents of the poem. The students who read faster obtained higher scores, and the students who read more slowly obtained lower scores.

The difference between the upper and lower groups is large in essays and small in dialogues and newspaper articles. The lower group read dialogues and essays very slowly, and whether or not they can

read essays well seemed to reflect their reading ability.

Scores and times. Students' total scores increased by 10% and their times decreased by 3%. Their scores on the directions and newspapers increased by more than 10%, indicating that they could understand these literary forms and handle figures. Except for the poem, times on individual sections decreased by about 5%. The total times of the upper group decreased 4.2%, and the lower group decreased 1.1%. In these tests, times of the better readers improved, and the scores of the poorer readers improved. These tests may have been too easy for measuring the reading proficiency of the upper group. The upper group improved reading newspapers and the lower group, poems.

Types of questions. There was a high ratio of errors in the vocabulary questions (54.2%) and in the interpretation and reference questions (37.7%). Their scores in these two categories distinguish the upper group and the lower groups, with the upper group doing much better on the questions than the lower group. In one academic year, students' ability to answer indirect questions improved, but their ability to answer interpretation and reference questions did not. The upper group's scores improved 19% on the indirect questions and 5% on vocabulary questions, and the lower group improved 37% on the indirect questions and 29% on the interpretation and reference questions. The upper group had a ceiling effect, but the lower group improved in their ability to guess the meanings of unknown words from context and to answer questions that did not come directly from the passages. This indicates that we can measure the reading ability of the upper group with vocabulary and the lower group with interpretation and reference questions. The reading ability of both groups could be measured with questions not using wording directly from the passages (indirect questions).

Students had difficulty with questions in cases where they

thought the first alternative was correct and did not read the rest of the alternatives (91.5%). They found two of the vocabulary questions particularly difficult (81.4% & 77.9%), they had difficulty inferring the season in the poem (64.8%), and counting the number of nouns in the passage (59.8%). They improved a great deal in their ability to fill in the chart with information from the passage. They also increased in their ability to understand the relationships among figures.

Evaluation of the Results

From the above results, we concluded the following.

1. The students could read essays but they had difficulty with poems, newspapers, and directions.
2. Essays have high correlations with the total scores and can be used to measure reading ability.
3. Students can improve their reading ability and reading speed.
4. Students with higher scores read faster and improved their speed more than the students with lower scores.
5. Students' vocabulary and ability to guess the meaning from the context is insufficient. The differences between the upper and lower groups are caused, in part, by that ability to guess.
6. Students can improve their ability to answer questions the answers of which do not come directly from the passage, and we can use such indirect questions to measure such improvement.

The above conclusions match the results of the two papers written by Kitao and Miyamoto (1982) and Kitao and Miyamoto (1983). However, the following conclusions are different.

1. Students' ability to read newspaper articles improved. This is perhaps partly because they could guess from the choices given.
2. A large part of the difference between the two groups was due to

vocabulary.

3. The improvement of the upper group can be seen on vocabulary questions, and of the lower group on the interpretation and reference questions.

In conclusion, college students read English slowly, but their reading speed can be improved a great deal with training, and it seems to be useful to have them read with time limits in order to push them to read faster. In general, students cannot read newspapers and poems well, and they need to improve their vocabulary knowledge and their ability to guess the meanings of unknown words from context. Essays can be used to measure overall reading ability. Teachers should include various literary forms and include the interpretation and reference questions.

The Fourth Study

The purpose of this paper is to look at the relationships between reading ability and reading speed using Form G and a reading speed test.

Procedures

A reading speed test was developed using the first eleven paragraphs of an essay entitled American Holidays and Festivals. Words not found on the JACET basic list of 3990 words were replaced with easier words. The passage had 1,249 words. The readability was 8 on Fry's readability scale. We made three variations of the test, one 35 letters (9 centimeters) across, one 50 letters (12.8 centimeters) across, and one 65 letters (16.5 centimeters) across. There were three short answer skimming questions and ten multiple choice questions with four alternatives. These

questions dealt with the main ideas from the second to eleventh paragraphs.

We administered Form G in April 1984 and the speed test in June 1984 students in 12 classes at five colleges. Both tests were taken by 438 students. We timed the reading speed test, including the time spent answering questions in Form G, as we did in previous studies. We wrote three skimming questions on the blackboard and let students to read the passage within 15 minutes, marking where they were in the reading each minute. After 15 minutes, we collected the reading passage, and we gave students the question sheets with three skimming questions and ten comprehension questions for five minutes.

Results

Form G. The results of Form G were similar in some ways with those of the previous study. Students found the essay easiest. The correlation between score and time is -.42, indicating that students with higher scores read faster. Students did not do well on the poem, newspaper article, or directions. Good readers improved their reading speed and poor readers improved their score. The mean score was 87% (56.98) of the last one, and the reading speed is 110% (30 minutes 34 seconds), indicating that this group of students are lower level in English than those in the previous study.

Speed test. The results of the reading speed measure in the reading test indicated that students were, on average, reading fastest for the first minute (110 words per minute). The average reading speed fluctuated until the 8th minute, when the fastest students finished and the average reading speed dropped.

The students varied a great deal in their reading speed. The average reading speed is 122 words per minute, 81% read 80-140 wpm, 20% is less than 100 wpm, and 13% is over 150 wpm. Students who read

the passage faster had lower scores on the comprehension questions. This contradicts previous results. We speculated that the students who read faster could not remember the content until they worked on the questions. (In the previous research, students could look back at the text while they answered the questions.) The way this measure was administered may measure memory and not reading ability.

The average score on skimming questions is 68%. This seems very low, especially considering that the questions were given before the students read the passage. The average score on the comprehension questions was 54%. The difference between the upper and lower groups was particularly large in questions in which the exact wording of the correct choice was not found in the passage. The scores on the last two questions were low, probably in part because some students did not finish.

As for the effect of the width of the reading passage, the three groups did not significantly differ in scores of Form G but there were significant differences between time spent at .05 level. There were significant differences at the .05 level on scores of the skimming questions and the comprehension questions between texts 35 letters wide and 50 letters wide, and between texts 50 letters wide and 65 letters wide, but not between 35 and 65 letters wide at the .05 level. Students read the passage 35 letters wide fastest.

We did not anticipate that Form G would accurately measure reading speed, but correlations between the reading speeds for the two tests were greater than .50. The slower readers in the upper group had higher scores, which contradicted the results of previous studies.

The Fifth Study

Procedure

We administered Form G in April 1984 (G1) and again in January 1985 (G2), and Form H in July 1984. We also administered the reading speed test (S1), which we used in the previous study, in July 1984. We administered a similar reading speed test (S2) in December 1994. S2 was similar to S1. It was a part of an essay entitled "Television," which had 919 words after we rewrote it, replacing words not on the JACET 3990 word list with easier words. Its readability was 8 on the Fry Readability Scale. S2 had 3 skimming questions and 9 comprehension questions. We wrote the skimming questions on the blackboard, and students had 15 minutes to read the passages and find the answers for S1 and 12 minutes for S2. Students marked their place in the reading passage each minute.

These tests were given to 13 classes of English, economics and sociology majors. The results of 333 students who took all five tests are analyzed. In their classes, the students used textbooks which had various literary forms, emphasized learning English without translations, and devices to time reading in order to help them improve their reading speed.

Results

Forms G and H. The results of Form G and H were similar to the results of previous studies. There were correlations between scores and reading speed (-.35 to -.49), that is, students with higher scores read faster. The students varied greatly in their reading proficiency. The scores of the lower group of students were only 50-70% of the upper group, and time spent by the lower group was 125% of the upper group. The essays were the best measurement for reading

ability, because the correlations between the total scores and scores of essays are highest (.68-.73), and the correlation between essays of G1 and G2 was highest (.51). Students improved their reading speed on directions and the dialogue by 12-14%. . However, they did not improve much on newspapers and poems.

Speed tests. On reading speed tests S1 and S2, students read 105 words per minute with 54% comprehension. Their reading speed varied as they read fastest for the first minute, slowed down for the 2nd and 3rd minutes, and then sped up again for 4th through 6th minutes. The difference between the reading speeds of the upper and lower groups were an average of 28 words per minute. They read 105 words per minute in S1 and 109 words per minute in S2. They improved the scores on the skimming questions for 200%. The upper group could read passage while comprehending the main ideas of the paragraphs in S2. They lacked the ability to organize information while they were reading. The vocabulary is the important difference between the upper and lower groups.

Sixth Study

Procedure

We administered Form E and the taught English courses without translation, emphasizing understanding paragraphs. We measured the reading speed and informed students of their reading speed. We used An American Sampler, which includes various literally forms. We gave Form E in April (E1) and again in following January (E2). Students who took the tests were English majors, commerce majors, law majors, and in classes with mixed majors, a total of 254 students. We chose the top and bottom 23% on E1 and formed an upper group of 59 students and a lower group of 59 students.

Tendencies of Errors

We analyzed errors with four types of questions: direct, indirect, interpretation and reference, and vocabulary. Since we analyzed only written in answers, we eliminated multiple-answer vocabulary questions.

We categorized the errors as follows:

I not understanding questions

1 misunderstanding wh- question words

2 not understanding the meaning of the question (e.g., When should pepper plants be fertilized? You should give them a lot of fertilizer.)

II not knowing the correct answer

1 not understanding in context (e.g., Where will Carlos stay tonight? The correct answer is "at the Riverside Hotel," but some gave such answers as "Caracas" or "New York.")

2 not reading carefully (e.g., How many seeds should be planted in each pot? The answer is "two to four" but some students missed "two to," and answered "four.")

3 not understanding referents (e.g., To what does "_____" refer? Some students did not understand parts of speech, singular or plural, and get the answer wrong.)

4 not understanding vocabulary (e.g., What time of day is it? From the phrase "darkness drifts down," evening is correct, but without understanding that vocabulary, errors were made.)

5 calculating answers or making mistakes in calculating (e.g., Calculating instead of picking figures out of the reading passage.)

6 creating meaning without understanding the context (e.g., Why won't fruit form at 36 . Without understanding the context, a student answered "Because it will be rotten," rather than "It is

too hot.")

III errors in expressing answer (writing)

1 trying to use the sentence or phrase directly from the passage (e.g., What kind of weather do peppers like? The correct answer is "They like hot weather." However, some students answered, "They like temperatures above 15 .)

2 using vocabulary incorrectly (e.g., "What time of day is it?" The correct answer was "Evening," but some students answered "late afternoon."

Results

Both the upper and lower groups had high rates of type II errors, and frequently did not answer at all in both E1 and E2. 48.9% of the errors were of type II in E1 and 60.6% in E2. 27.6% of the errors due to lack of an answer on E1 and 13.0% in E2. Together these two types of errors made up more than 70% of the errors. Errors of type I made up 8.7% of the errors on E1 and 7.8% on E2.

Differences between the upper and lower groups was 4.7% for type III errors on E1 and 3.2% on E2, but 22.9% for type II errors on E1 and 23.9% on E2.

As for direct questions, type I-1 made up 34.2% of the errors, and no answer made up 33.9% on E1. The next largest category was Type III-1, which made up 10.1%. The differences between the top and bottom groups are large in type II-1 and no answers. E2 shows the similar results with the top group, but the bottom groups shows 19.8% lower in no answers.

As for indirect questions, type II-1 made up 29.0% of the errors, and no answers made up 25.2% on E1. Type II-1 made up 29.7%, and type III-1 21.7% on E2. II-5 is reversed between the top and bottom group in both tests. The bottom group decreased no answers

7.7% on E2.

As for interpretation and reference questions, type II-1 made up 46.9% of the errors, and type II-3 made up 27.4% on E1. The differences between the two groups were large in those types. E2 shows similar results for the top group, but the bottom groups decreased no answers 11.4%.

From the above, we concluded as follows. 1) Neither group understood and used context well. 2) Both groups understood the questions. 3) The bottom group does poorly at expressing answers. 4) The top group had more errors with figures or calculating them. 5) The bottom group decreased no answers about 15% from E1 to E2.

Next, I will discuss the implications of these results.

1) Students seem to understand individual sentences but they cannot understand larger units. We should teach students to deal with a whole passage or a paragraph and then, try to understand individual sentences.

2) About 92% of the students understood questions with less than 10 words. However this means that 8% do not. We need to teach them to read and understand short sentences.

3) Students are not used to answering questions in English. We could teach students to answer in short sentences using key words at the beginning and developing expressions gradually.

4) The top group was careless and miscalculated figures.

5) There were two causes for the lack of answers. One was lack of time, and the other was not knowing how to express the answers. They need to learn to read faster.

Conclusion

The results of these studies lead to a number of suggestions for the teaching of reading in Japanese universities.

1. Students do not have enough experience dealing with a variety of literary forms. College English reading textbooks often do not have literary forms other than essays. Students would also benefit from reading newspaper articles, poems, directions, and so on.
2. It is better, particularly at the beginning to teach students using short passages, because longer passages in English put too much of a burden on students' memories. Gradually, as they become more accustomed to reading English, students can be given longer passages.
3. Students at different levels of proficiency need different types of questions. Lower-level students can answer direct questions and should be introduced to indirect and interpretation questions only gradually. Upper-level students generally find direct questions too easy, and benefit more from indirect and interpretation questions.
4. It is important to work on increasing students' reading speed.
5. Tests should combine difficult and easy passages.
6. It is important to teach students, particularly for more advanced students, how to guess the meanings of unknown words from context.
7. Various types of questions--indirect vs. direct, multiple choice vs. short answer, etc.--have different effects. Teachers and test makers should be aware of these effects.

Appendix

ENGLISH READING COMPREHENSION EXAMINATION

Form G

This test is to measure your overall reading comprehension in English. There are five sections: directions, a conversation, an essay, a newspaper article, and a poem. Each section has a short reading passage followed by 5 or 10 questions and is worth 20 points. Work on each section as quickly and accurately as possible. The amount of time you spend and your score will be recorded.

I. Read the following passage and answer the questions.

Peppers are considered to be hot weather plants: thus they like temperatures above 15 C. On the other hand, they also like temperatures below 33 C. Anywhere outside this temperature range from 15 C to 33 C seems to keep the fruit from forming.

If you use seeds, you should plant them indoors in pots--two to four seeds a half-inch deep in each pot--about ten weeks before you plan to set the plants outdoors.

In your garden plant the young plants 14 inches apart.

Peppers need lots of regular watering. They are also heavy feeders, and you should give them a lot of fertilizer about the time the first blossoms open. (Use according to the instructions on the fertilizer package.)

1. What kind of weather do peppers like?
1) They like temperatures above 15 C and below 33 C.
2) They like temperatures ranging between 15 C and 33 C.
3) They are hot weather plants.
0) They like hot weather.

2. Why won't fruit form at 36 C?
1) Because they like temperatures below 33 C.
2) Because 36 C keeps fruit from forming.
3) Because they like temperatures between 15 C and 33 C.
0) Because 36 C is too hot.

3. How many seeds should be planted in each pot?
1) two
2) four
0) two, three, or four
4) two or four

4. How deep should seeds be planted?
1) 14 inches apart
2) 14 inches deep
0) a half-inch deep
4) a half-inch apart

5. When should pepper plants be fertilized?
1) for about ten weeks
0) when the first blossoms open
3) in the spring
4) after ten weeks

II. Read the following passage and answer the questions.

Driver: Where'll it be?
Carlos: Riverside Hotel, please
Driver: Geez! How come you didn't take the limousine? You must be rolling in it!
Carlos: Rolling?
Driver: Rolling in it--you know--rich. Why didn't you take the limo? It goes right to the Riverside and it's only four dollars.
Carlos: Really? I didn't know that. I thought a limousine was a big, rented car.
Driver: Oh no! It's the big bus that shuttles between the airport and the city.
Carlos: Shuttle?
Driver: Yeah! You know--back and forth between the airport and downtown. Where in the world are you from, anyway?
Carlos: Caracas, Venezuela.
Driver: You're a long way from home. What're you doing here?
Carlos: I'll be studying a year at New York University.
Driver: N.Y.U.? Are you a brain or something? Is that all the luggage you have for a year? Wow, you should see what some people bring for just a week!
Carlos: My family's sending most of my books and things air freight.

1. What city is Carlos in now?
1) Caracas
0) New York
3) Riverside
4) Venezuela

2. Where will Carlos stay tonight?
0) at the Riverside Hotel
2) in Caracas
3) at N.Y.U.
4) in New York

3. What is Carlos riding in now?
0) a taxi
2) a limousine
3) a big bus
4) a rented car

4. How will the rest of Carlos' luggage be sent?
1) by his family
2) by air mail
3) by some people
0) by air freight

5. What do you think Carlos has with him?
0) a small suitcase
2) luggage and books
3) 2 big suitcases
4) a trunk

III. Read the following passage and answer the questions.

Today the game reserves of East Africa are facing a number of threats. Although they earn considerable "revenue" by attracting tourists, they take up land which is increasingly sought by the local people. While these reserves feed and protect animals, they are in danger of turning into "barren" areas or deserts. Trees, shrubs and grass are gradually being eaten by grazing herds.

Another problem is to be found in the changing attitudes of the animals themselves. Many of them are losing their hereditary fear of man. In this way they may become a danger to visitors and thus to themselves. Attacks on vehicles are beginning to increase, and it is possible that the problem will become serious in a few years' time.

The problem of shortage of land is not simple one. As the population increases, more and more people look hungrily at the land set aside for game reserves. They claim that a government's first duty is to its inhabitants and not to tourists or to wild animals. Despite the income obtained from tourism, this is an argument which is difficult to answer "satisfactorily".

1. Which of the following is the most suitable title for the passage?
1) Problems Facing East African Tourists
2) African Wild Animals Becoming More Dangerous
3) The Increasing Popularity of Game Reserves
0) Some Problems of East African Game Reserves

2. As far as we can tell from the passage, why does the government continue to maintain game reserves?
1) to stop people from using the land
2) to keep the vegetation under control
3) to reserve it for building development
0) to obtain income from tourism

3. What is the meaning of REVENUE in line 2?
1) respect
2) fame
3) reputation
0) money

4. What does BARREN mean in line 5?
1) vast
0) useless
3) crowded
4) wide

5. What does SATISFACTORILY mean in the last sentence of the passage?

1) quickly
2) ill
3) immediately
0) adequately

IV. Read the following newspaper article and answer the questions.

LONDON (AP) -- Women account for almost three-quarters of British workers defined as low-paid, says a report published Wednesday - even though women's pay has increased 50 percent more than men's since the early 1960s.

The report, condensed from findings of the Royal Commission on the Distribution of Wealth and Income, says 68 percent of women in British manual jobs are low paid, as are 46 percent of women in non-manual work. Low pay is defined as the level of the bottom tenth of male manual workers - about 56 pounds ($125) a week.

The booklet is the last publication by the commission, which was wound up by the government in July after five years' work.

Besides reporting on female pay, it also highlights the fact that the richest 1 percent of the British people still own 25 percent of the nation's wealth - more than is held by the poorest 30 percent.

In 1923 the richest 1 percent owned 60 percent of the nation's wealth, so there has been some narrowing of the gap. One reason has been that the very rich still hold much of their wealth in company stocks, which have not performed well in recent years.

The less well off have had more of their assets tied up in houses, which have been a far better investment.

The richest 5 percent of the population still own 30 percent of company shares held by individuals, the report says.

1. Low paid people make about ( ) pounds a week.

0) 56
2) 125
3) 28
4) 84

Low paid British workers

	women	men
manual jobs	(2)%	(3)%
non-manual jobs	(4)%	

2.
1) 50
0) 68
3) 46
4) 54

3.
1) 50
2) 56
3) 42
0) 10

4.
1) 68
0) 46
3) 35
4) 32

Percent of nation's wealth held by

	now	1923
richest 1%	(5)%	(6)%
(7) 30%	(8)%	

5.
1) 5
2) 30
3) 60
0) 25

6.
0) 60
2) 1
3) 5
4) 25

7.
1) the nation's wealth
2) low paid
0) poorest
4) more than

8.
1) less than 30
0) less than 25
3) less than 75
4) less than 5

9. Percent of stocks owned by individuals: (9)% stocks owned by the richest (10)%.
1) 25
2) 60
3) 5
0) 30

10. Percent of stocks owned by individuals: (9)% of stocks owned by the richest (10)%.
0) 5
2) 1
3) 30
4) 6

V. Read the following poem and answer the questions.

THREE KINDS OF PLEASURES

I

Sometimes, riding in a car, in Wisconsin
Or Illinois, you notice those dark telephone poles
One day one lift themselves out of the fence line
And slowly leap on the gray sky--
And past "them", the snowy fields.

II

The darkness drifts down like snow on the picked cornfields
In Wisconsin, and on these black trees
Scattered, "one by one",
Through the winter fields--
We see stiff weeds and brownish stubble,
And white snow left now only in the wheeltracks of the combine

III

It is a pleasure, also, to be driving
Toward Chicago, near dark,
And see the lights in the barns.
The bare trees more dignified than ever,
Like a fierce man on his deathbed,
And the ditches along the road half full of a private snow.

1. In line 5, to what does the word "them" refer to?
1) the grey sky
2) leaping
0) telephone poles
4) the fence line

2. In Section II, what time of day is it?
1) night
0) evening
3) darkness
4) morning

3. In line 8, to what does "one by one" refer?
1) darkness
2) snow
3) cornfields
0) black trees

4. In section II, where is the snow?
0) in the wheeltracks of combine
2) in the cornfield
3) in Wisconsin
4) on the road

5. In section III, what time of year is it?
1) late spring
2) early spring
3) fall
0) winter

ENGLISH READING COMPREHENSION EXAMINATION

Form H

This test is to measure your overall reading comprehension in English. There are five sections: directions, a conversation, an essay, a newspaper article, and a poem. Each section has a short reading passage followed by 5 or 10 questions and is worth 20 points. Work on each section as quickly and accurately as possible. The amount of time you spend and your score will be recorded.

I. Read the following passage and answer the questions.

CARROTS COOKED IN BUTTER

This is one of the most tasty ways of cooking carrots, and also the most sensible. Root vegetables easily absorb fat. By cooking not in water but in butter, you help to conserve nourishment.

You need a thick saucepan with a really tightfitting lid. (This is essential because the carrots cook in the steam from their own moisture, and they produce so little steam that none of it must escape.)

COOKING TIME

Sliced old carrots--10-20 minutes; whole new carrots--up to 45 minutes

INGREDIENTS

carrots, about 1 tablespoon of butter, seasoning, a very small amount of sugar, chopped parsley

METHOD

1) "Scrub" and peel the carrots and cut older carrots into even slices, not too thick. New carrots can be left whole.

2) Heat enough butter to cover the bottom of the pan well. When it is hot but not smoking, add the carrots.

3) Add salt and pepper, but not too much because, in this way of cooking, none of the seasoning's flavor will be lost.

4) Cover with lid and cook over a gentle heat, shaking the pan occasionally so that the carrots do not stick or burn. Sliced carrots will take 10-20 minutes to become tender according to thickness. Whole new carrots may take up to 45 minutes.

5) Sprinkle lightly with the sugar--this helps to bring out the natural flavor of the carrots. Also sprinkle with coarsely chopped parsley if you like the extra color and flavor.

6) Serve with any buttery juice still remaining.

1. What kind of vegetables are carrots?
1) green vegetables
2) root vegetables
3) fat vegetables
4) tasty vegetables

2. How long should whole new carrots be cooked?
1) for about 45 minutes
2) for at most 45 minutes
3) for more than 45 minutes
4) for 55 to 65 minutes

3. How many ingredients are suggested for this dish?
1) 2
2) 3
3) 4
4) 5

4. The carrots should be cooked in butter to _____.
1) save time
2) produce steam
3) absorb water
4) conserve nourishment

5. A tightfitting lid is needed to _____.
1) prevent steam from escaping
2) prevent the carrots from escaping
3) conserve sauce
4) let moisture escape

6. "Scrub" in line 15 means:
1) wash with a brush
2) scrape with a knife
3) remove the skin of the carrots
4) cut with knife

7. In the pan, the butter should _____.
1) be deep
2) cover the carrots
3) be shallow
4) be smoking

8. Not too much seasoning should be added because _____ will not be lost.
1) a lot of salt and pepper
2) steam
3) its taste
4) not too much salt and pepper

9. Which is NOT correct?
1) The carrots should be cooked over a low fire.
2) The carrots should be shaken over a gentle fire
3) The carrots should be burned over a gentle fire.
4) The carrots should be cooked over gentle heat.

10. ______ carrots will take ______ minutes to become tender.
0) Thickly sliced, 20
2) Very thinly sliced, 19
3) Old, 45
4) Whole new, over 45

11. Read the following passage and answer the questions.

Brenda: We can be leaders, too, you know.
Ron: Of course you can. I didn't say that you couldn't. There are some clubs with girl presidents.
Rita: Right. And you know which ones? (She lists obvious and unimportant clubs.) The French Club, the Art Club, and the Home Economics Club.
Mark: That's right. So why are you complaining?
Ann: Why can't a girl be "student body" president?
Rita: (backing her up) Why is it always a guy?
Larry: There's no rule. But it's just always been that way.
Jane: So you think that because it's always been that way, it should continue to be that way.
Kay: You want girls for club secretary or treasurer or any job that does all the work. You guys want the jobs that get all the glory.
Rita: Why shouldn't girls be president of the band or the sports club or the drama club?
Ron: That's silly. What good would it do to have a girl for president of the sports club? No one comes to see girls' sports.
Ann: (angrily) And why not?
Larry: What do you mean?
Brenda: Female sports are never pushed, that's why not! They put all the money into football and basketball.
Joel: It doesn't do any good to push female sports.
Mark: That's right--no one comes to see girls' sports, anyway.
Jane: Now just a minute--a lot of people showed up for Jessie's Olympic tryout.
Ann: Yeah. And she's the only person from this school who ever got an Olympic tryout. No guy ever has.
Jane: The school got a new football stadium instead of a gym with a pool, so she had to do all her practice and tryouts at the YWCA.
Ann: OK, now--what about THAT.

1. In the first line, who does "we" refer to?
1) Brenda, Rita, Ann, Kay and Jane
2) Everyone
0) girls
4) guys

2. Which of the following is considered an important club at the school?
1) the French Club
0) the sports club
3) YWCA
4) the Art Club

3. What is the "student body"?
1) club leaders
2) all the students
3) sports club
4) student representatives

4. How many girls have been president of the student body?
1) two
2) three
3) several
4) none

5. According to Kay, who does more work?
1) the club president
2) Jane
3) the club secretary
4) the guys

6. What sport is Jessie good at?
1) female sports
2) Olympic tryouts
3) football
4) swimming

7. What sports get money from the school authorities?
1) football
2) football and basketball
3) football and baseball
4) female sports

8. What new sports facility was built at the school?
1) a football stadium
2) a swimming pool
3) a gym
4) none

9. Where did Jessie practice?
1) at the YMCA
2) at the football stadium
3) at the gym
4) at the YWCA

10. Why didn't Jessie practice at the school?
1) Because no one came to see her.
2) Because there was no football stadium at the school
3) Because there was no swimming pool at the school
4) Because there was no gym at the school

III. Read the following paragraphs and answer the questions.

The floor of most of the school is covered with brown and gold carpeting. The walls and ceilings are white, and there are no windows in the classrooms. Most of the classrooms have no doors; they open directly onto the halls. The walls are supposed to be movable, so when "open classrooms" are needed, the walls can be removed. There are special classrooms for home economics, art, music, dramas, sciences, and special studies for students not planning on attending college. Besides the classrooms we have the basic facilities for most schools: a cafeteria, a gymnasium,

an auditorium, locker rooms, and a library.

Our library, however is different from most school libraries. We call it a media center because it includes much more than books. Small rooms branch off of it with supplies for students to listen to tape recordings, listen to records, and show themselves filmstrips. Across the hall, included as part of the media center, is our "audio-visual" room. This room is used for storing equipment for teachers to borrow for use in their classes. There are film projectors and overhead projectors to project writing onto the walls.

The most unique feature of our media center is the television studio. There students can create and film television shows that can then be viewed on any or all of our many television sets. This studio is used for special projects which the average student is involved in once a year.

This is a description of very modernized high school possessing many facilities that the ordinary school lacks. Most schools do not have carpeting and air conditioning, but there will be doors on the classrooms. Although the library would not be as highly developed, it would adequately fulfill the students' need.

1. The unique feature of "open classrooms" is classrooms without _____.

1) windows
2) doors
3) walls
4) walls and windows

2. Our library is called a media center because it has _____.
1) many other things except books
2) only books
3) only tape recordings, records, and filmstrips
4) film projectors and other machines

3. Our audio-visual room includes _____.
1) a movie camera
2) slide projectors
3) video recorders
4) overhead projectors

4. The main purpose of the television studio is _____.
1) to show students TV programs
2) for teachers to make TV programs for the class
3) to make TV shows for entertainment
4) for students to make TV shows

5. Ordinary schools do not have _____.
1) film projectors
2) tape recordings
3) carpeting
4) doors on the classrooms

IV. Read the following newspaper article and answer the questions.

Washington (Washington Star)-- The unemployment rate was 7.8 percent in July, almost unchanged from June, as the decline in employment of the last four months apparently "leveled off", the Labor Department reported Friday.

The 7.8-percent rate, following the 7.7 percent in June and the 7.8 percent in May, gives three months of fairly level unemployment after the unemployment rate jumped from 6.2 percent to 7.8 percent between March and May.

Unemployment for adult males, at 6.7 percent, and adult women also at 6.7 percent, were essentially unchanged. Unemployment for blacks rose to 14.2 percent, up from 13.6 percent.

The economic signals in the figures were mixed, and Janet Norwood, the commissioner of the Bureau of Labor Statistics, said it was too early to suggest any new trend. Many economists have been predicting that the unemployment rate will rise to near 9 percent by the end of the year.

Total employment was up 460,000, after four months of sharp declines. But since February total employment is still down by about 950,000. At the same time, the labor force--the total of all the employed and unemployed --rose 650,000 in July, which is why the rate of unemployment rose slightly.

But payroll employment, which excludes farm workers and is measured in a separate survey, fell 240,000 in July. The Labor Department said this drop was attributable to major strikes in the mining and construction industries, which have idled about 150,000 workers. However, in the payroll survey, these workers are counted as not working but as still employed in the total employment survey.

In addition, the federal government is laying off about 90,000 workers who had been hired to do the 1980 census, the department said, and this added to the payroll employment drop.

1. In line 5, what does "level off" mean?
(1) become stable
2) decrease
3) rise
4) change

2. The unemployment rate rose by ------% between March and May.
0) 1.6
2) 1.8
3) 9
4) 107.8

3. What two industries had strikes?
1) the Labor Department and the Bureau of Labor Statistics
2) the Bureau of Labor Statistics and the federal government
3) farm workers and payroll employees
0) mining and construction

4. What was the July increase in the labor force?
1) slight
2) 150,000
3) 190,000
0) 650,000

5. By what amount did the payroll employment decrease in July?
1) 90,000
2) 150,000
0) 240,000
4) 390,000

V. Read the following poem and answer the questions.

A BLESSING

Just off the highway to Rochester, Minnesota,
Twilight bounds softly forth on the grass.
And the eyes of those two Indian "ponies"
Darken with kindness.
They have come gladly out of the willows
To welcome my friend and me.
We step over the barbed wire into the pasture
Where they have been grazing all day, alone.
They ripple tensely, they can hardly "contain" their happiness
That we have come.
They bow shyly as wet swans. They love each other.
There is no loneliness like theirs.
At home once more,
They begin munching the young tufts of spring in the darkness.
I would like to hold the slenderer one in my arms,
For she has walked over to me
And nuzzled my left hand.
"She" is black and white,
Her mane falls wild on her forehead.
And the light breeze moves me to caress her long ear
That is delicate as the skin over a girl's wrist.
Suddenly I realize
That if I stepped out of my body I would break
into blossom.

1. What time of day is it?
1) dawn
2) early morning
0) evening
4) night

2. What time of year is it?
0) spring
2) summer
3) fall
4) winter

3. How many people are present?
1) 1
0) 2
3) 4
4) none

4. How many swans are present?
1) 1
2) 2
3) 3
0) none

5. What does "she" refer to in line 18?
0) the slenderer pony
2) a swan
3) two ponies
4) tufts

Notes

[1]The members of the College Reading Materials Research Project were K. Kitao, V. Broderick, B. Fujiwara, M. Inoue, S. K. Kitao, H. Miyamoto, and L. Sackett.

[2]The papers that these summaries are based on are:

First Study

Kitao, K. & Miyamoto, H. (1982). Daigakusei no eigo dokkairyoku--Chosa ni yoru kosatsu [Japanese college students' English reading ability--A study based on testing]. Doshisha Studies in English, 30, 135-165.

Second Study

Kitao, K. & Miyamoto, H. (1983). Daigakusei no eigo dokkairyoku no mondaiten--Goto no keiko to suii [Japanese college students' problems in reading English--Tendencies and changes in errors--]. Doshisha Studies in English, 32, 118-147.

Third Study

Kitao, K. & Yoshida, S. (1985). Daigakusei no eigo dokkairyoku to sono speed no kenkyu [A study of college students' English reading comprehension and speed]. Chubu Chiku Eigo Kyoiku Gakkai Kiyo [Chubu English Language Education Society Collected Papers], 14, 28-34.

Fourth Study

Kitao, K., Kitao, S. K., Yoshida, S., & Yoshida, H. (1985). Daigakusei no eigo dokkai sokudo no kenkyu [A study of college students' reading speed]. Chubu Chiku Eigo Kyoiku Gakkai Kiyo [Chubu English Language Education Society Collected Papers], 14, 168-174.

Fifth Study

Kitao, K., Yoshida, S., & Yoshida, H. (1986). Daigakusei no eigo dokkairyoku no mondaiten--Goto no ruikei to genin-- [Japanese

college students' problems in reading English--Tendencies and cases in errors]. Chubu Chiku Eigo Kyoiku Gakkai Kiyo [Chubu English Language Education Society Collected Papers], 15, 8-13.

Sixth Study

Yoshida, S. & Kitao, K. (1986). 5tsu no dokkai test o riyo shita daigakusei no eigo dokkai sokudo oyobi rikaido no kenkyu [Japanese college students' English reading ability and reading speed--A study based on 5 tests]. Chubu Chiku Eigo Kyoiku Gakkai Kiyo [Chubu English Language Education Society Collected Papers], 15, 183-188.